
Class of 1995

*The Nursing Class
of
Nineteen hundred and ninety-five
of
Roxbury Community College
requests the honour of your presence
at its
Nursing Pinning Ceremony
Friday, May twenty-sixth
at three o'clock in the afternoon
Theatre Arts Building
1234 Columbus Avenue
Roxbury, Massachusetts*

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$\frac{dx}{dt} = A(x)u, \quad \frac{dy}{dt} = B(y)v, \quad (1)$$

where $A(x)$ and $B(y)$ are matrices depending on the variables x and y respectively, and u and v are control functions.

It is shown that the system (1) has a solution if and only if the matrices $A(x)$ and $B(y)$ are invertible.

2. In the second part of the paper the problem of the existence of solutions of the system of equations

$$\frac{dx}{dt} = A(x)u, \quad \frac{dy}{dt} = B(y)v, \quad (2)$$

is considered, where $A(x)$ and $B(y)$ are matrices depending on the variables x and y respectively, and u and v are control functions.

It is shown that the system (2) has a solution if and only if the matrices $A(x)$ and $B(y)$ are invertible.

3. In the third part of the paper the problem of the existence of solutions of the system of equations

$$\frac{dx}{dt} = A(x)u, \quad \frac{dy}{dt} = B(y)v, \quad (3)$$